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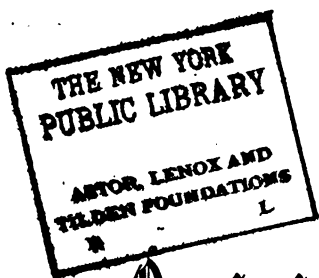
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Quicksilver Mining Comp.
Annual report...
1882.





THE

Quicksilver Mining Company.

ANNUAL REPORT

(With Tables and Tabular Statements,)

[1882]

SUBMITTED AT THE

Annual Meeting of the Stockholders

Held in New York February 28th, 1883.

3-VHT

NEW YORK:

D. MURPHY'S SON, STEAM PRINTER, 65 FULTON STREET

1883.



DIRECTORS AND OFFICERS

OF THE

Quicksilver Mining Co.

CHARTERED BY THE STATE OF NEW YORK.

Elected February, 1883.

PRESIDENT.

DAVID MAHANY.

VICE PRESIDENT.

GEORGE W. BUTTS.

DIRECTORS

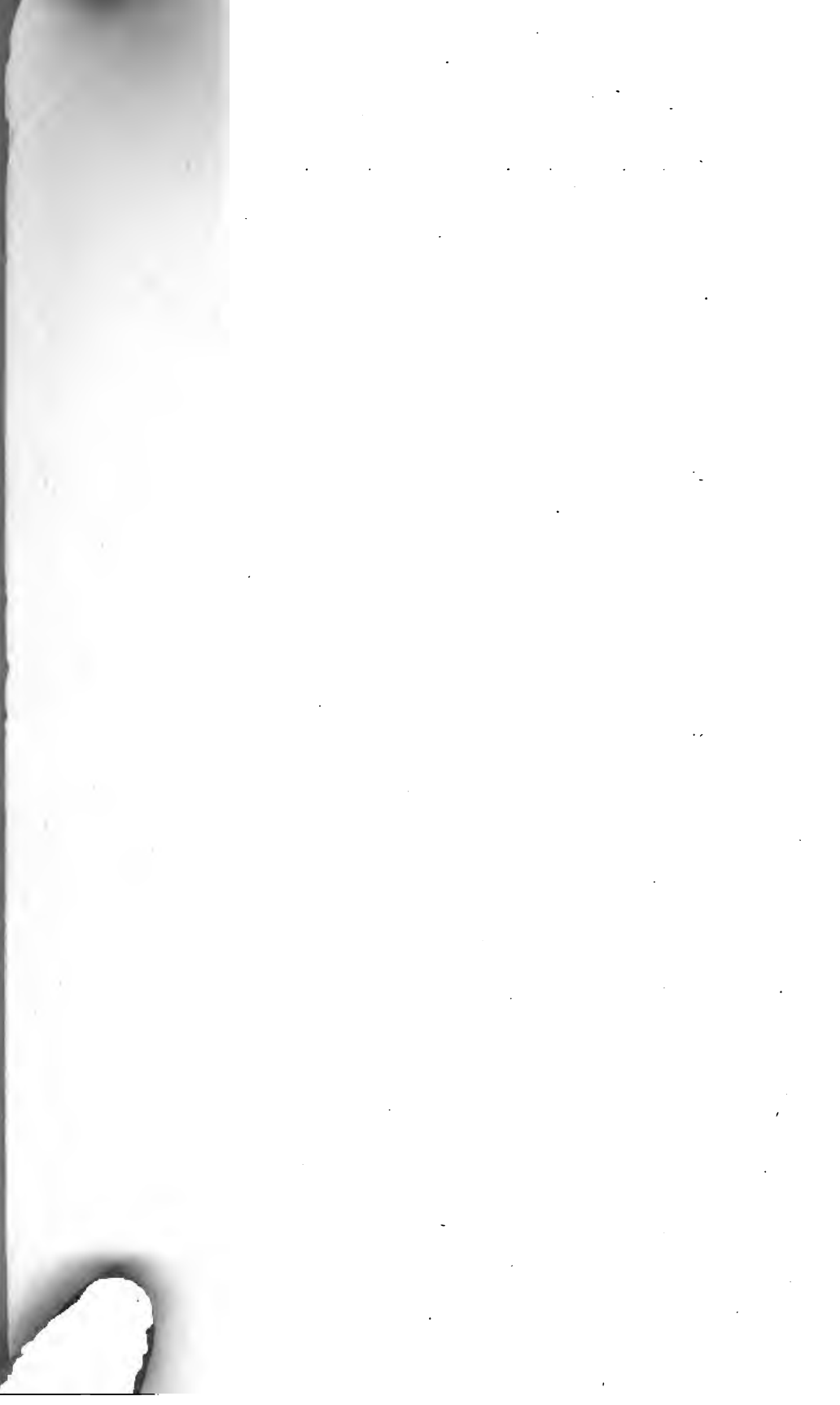
DAVID MAHANY,	.....	NEW YORK.
GEORGE W. BUTTS,	.....	PROVIDENCE, R. I.
JAMES H. BANKER,	.....	NEW YORK.
SAMUEL W. BOOCOCK,	.....	"
JAMES D. SMITH,	.....	"
EDWARD BRANDON,	.....	"
CHARLES FRIES,	.....	"
F. N. LAWRENCE,	.....	"
SHEPPARD GANDY,	.....	"
FRANK K. STURGIS,	.....	"
GEORGE G. HAVEN,	.....	"

TREASURER,

F. N. LAWRENCE.

SECRETARY,

M. M. WEED.



The Quicksilver Mining Company.

PRESIDENT'S REPORT.

To the Stockholders of The Quicksilver Mining Co.

GENTLEMEN :

I submit herewith for your information and consideration my Annual Report of the operations of your Company during the past year.

In order that your knowledge of the condition of the affairs of the Company may be as complete as possible, I submit in connection with my Report full tabulated statements from the Manager and Assistant Superintendent, of the operations, condition and progress of your Company, many of them of much interest and value, and some of them extending over a long series of years. It is scarcely necessary to particular-

ize ; but in general I may say, that an examination of the accompanying documents will show that your property, has in every respect been maintained at the high standard for which our management is justly noted, nothing whatever has been allowed in any way to deteriorate.

Nor has the policy of maintaining a proper reserve of ore been departed from, there being now substantially mined and on hand sufficient to supply the furnaces at their full capacity for the coming year.

It will be seen from the financial statements accompanying this report, and this, perhaps, is the point of greatest interest, that the net earnings of the Company for the year 1882, have been \$249,537 81, and that this sum has been expended in substantial betterments to your property, to wit : in sinking a new shaft, of which we have now four, well equipped in every way, and capable of opening and exploring the Mine at a depth of 2000 feet, and in general betterments, renewals and repairs to the Furnaces.

The great drawback to our property during the past year, has been the continued extremely low price of Quicksilver, it having ruled lower than ever before known ; but since the date of this report there is a better outlook, accompanied by a slight improvement in price. As intimated in my Report of last year the competition of other Companies in California has greatly weakened ; their total production having fallen off some 10,000 flasks, while the production of our Company has increased more than 2000 flasks ; while at the

same time, owing to liberal expenditures in the past in maintaining our reserves, we are now in a position such that, if the price of Quicksilver should warrant, we can at once, and rapidly by utilizing our reserves, increase our out put without corresponding increase of our current expenses.

The tabulated statements accompanying this Report and printed as a part of it, are believed to be so full and complete in every particular, that an examination of them by any Stockholder will enable him to judge as fully of the present condition and future prospects of your property, as any officer of the Company can do. As for myself I consider the outlook to be very encouraging.

FOR THE DIRECTORS,

DAVID MAHANY,

President.

MONTHLY PRODUCTION OF QUICKSILVER.

January.....	1632	flasks-
February.....	1924	"
March.....	2078	"
April.....	2110	"
May.....	2446	"
June.....	2318	"
July.....	2522	"
August.....	2432	"
September.....	2766	"
October.....	2844	"
November.....	2619	"
December.....	2379	"
<hr/>		
Total.....	28,070	flasks.

NEW ALMADEN, CALIFORNIA,

January 31st, 1883.

*To the President and Board of Directors
of the Quicksilver Mining Company, New York:*

GENTLEMEN:

I have the honor to submit the following report
on the operations of your business in California under my
charge for the year ending December 31st, 1882:

The receipts were	\$739,962	17
Of which there were from Quicksilver sales	\$719,836	31
Miscellaneous	20,089	86
<hr/>		
By my last yearly report there was a cash balance of	20,792	81
<hr/>		
Making total to be accounted for	\$760,718	98

The expenditures were \$729,503.69, as follows:

Materials and Supplies	\$123,409	24
Pay Rolls	330,806	33
Miscellaneous, Taxes and Interest...	34,121	35
Litigation	315	10
General Improvements	47,260	17
Garfield Shaft	39,381	46
Buena Vista Shaft	154,209	95
My remittance to New York office with exchange	184,269	87
<hr/>		
Making a total of	\$913,773	47

Balances, Overdrafts, Purchases and Pay Rolls .. \$153,054 49

The property accounts show credit balances of \$376,577.57, as follows:

Quicksilver.....	\$240,448 00
Materials and Supplies.....	76,859 53
Ores at Hacienda.....	59,270 04

The expenditures for improvements not charged to operative expenses were \$47,260.17, and the costs for the Garfield and Buena Vista Shafts were \$193,591.41, making the total for Improvements, New Shafts and Machinery, \$240,851.58,

The earnings of your Mines and Works at New Almaden were \$783,535.63, and the expenses of operating the same were \$498,695.12, leaving as net earnings \$284,840 51.

From this last-named sum is to be deducted \$14,601.46 for depreciation in value of Quicksilver on hand January 1st, 1882, and for decrease in quality of Ores at Hacienda, \$20,701.24, together \$35,302.70, leaving a balance of \$249,537.81 to be carried to the credit of profit and loss.

The decrease in quality of ores at Hacienda is nearly offset by an accumulation at the Planillas or Clearing floor, which is not taken into the accounts until delivery is made at the furnaces.

In addition, it is estimated that the quantity of mined ores in the labores and underground workings, is about 40,000 tons, or more than sufficient to keep our furnaces fully supplied for one year.

None of these ores have been included in the valuations of assets. When I took charge of your mines in 1870 there were no reserves in the Labores; the ore bodies were nearly exhausted, and it was difficult to get a sufficient daily supply to keep the furnaces in operation, they then having a yearly capacity of 11,000 tons.

The furnace plant has been rebuilt, improved and enlarged, so as to have now a yearly capacity of 36,000 tons, and the mines have been developed to supply that quantity, and have also accumulated large reserves ready to be brought to the surface at the cost of transportation and hoisting when they shall be required.

In 1883, if it meets your approval, we shall decrease the outlay for dead-work and opening new ore bodies, withdrawing and making available a portion of the reserves.

In 1870 the mine was developed to a depth of only 800 feet taking the summit of Mine Hill as a starting point. It was worked through one small shaft not communicating directly with the surface. One small engine hoisted the ore in a bucket,

We now have four shafts, well equipped with modern machinery, for pumping and hoisting; the mines are opened to a depth of 2,000 feet, or 1,200 feet deeper than in 1870, and we have ore on the lowest level.

For the twelve years of my service, ending December 31st, 1882, the earnings have been \$9,115,268.56, the expenses were \$5,352,562.65, the profit balance \$3,762,705.91, and the production of Quicksilver 229,422 flasks.

During 1882 all operations at the Mines and Works have been rigorously prosecuted, and the work accomplished in every department exceeds that of any other year in the history of your property.

Compared with 1881, the results show as follows:

Shaft sinking, drifting and tunneling, 9133 feet, an increase of 4559 feet.

Materials (rock and ores) mined and brought to the surface, 109,948 tons, an increase of 31,350 tons.

Ores sent to the Hacienda 34,216 tons, an increase of 400 tons. Ores roasted 36,073 tons, an increase of 1,350 tons.

Quicksilver produced 28,070 flasks, an increase of 2,010 flasks, and the largest yearly production since 1866.

The only decrease, was in the percentage yield of the ores, being 2,976, against 3,108, a falling off of 0.132 per cent.

The total production of Quicksilver in California in 1882 was 52,732 flasks or 8,119 flasks less than in 1881. The Guadalupe Mine produced 1,138 flasks, against 5,228, and finally ceased operations; the Sulphur Bank Mine made less than one half of its product of 1881; the Great Western fell off 1000 flasks; the New Idria was 822 flasks short, producing only 1,953 flasks, the Redington maintained its small product, 2,228 flasks, while the Napa Consolidated with a new furnace, and additional ore-receipts from a small mine in their vicinity, called the "Ætna," increased its product to 6,241 flasks, a gain of 1,062 flasks. The Great Eastern doubled its product, making 2,124 flasks; altogether the outside mines made 24,662 flasks, or 10,129 flasks less than 1881.

Prices were low throughout the year opening at 37 cents, advancing to 38 cents, and closing at 35 $\frac{1}{4}$ cents, with little demand.

In London Quicksilver opened at £6,5 shillings, fluctuated toward lower figures, until closing at £5,15 shillings per flask.

Our January cablegram gives a quotation of £5,10 shillings, which is the lowest price ever known in that market.

The receipts of Quicksilver in London from Spain and Austria for the year 1882, were 45,921 flasks, and exports for same, 40,423 flasks, leaving stock on hand of year ahead 86 to 90,000 flasks. The low prices, shorter time for transportation and small freight from there, have entirely lost us the New York trade of at least 12,000 flasks yearly, and we can only regain it by a protective tariff, a fact which I have heretofore repeatedly brought to your notice.

The accompanying tables give details of the accounts, and are supplemented by a comprehensive report on the work at the Mine and Furnaces, by Mr. F. S. Rice, Assistant Superintendent, all of which are respectfully submitted for your approval.

I am your obedient servant,

J. B. RANDOL,
Manager.

PROPERTY ACCOUNTS 1882.

On the 31st December, 1881, there were Balances as follows :

Quicksilver.....	\$209,190 00	
Materials and Supplies.....	87,217 73	
Ore Account.....	79,971 28	
		<hr/>
Cash.....		\$376,379 01
		20,792 81
		<hr/>
		\$397,171 82
Collected on account, Patent account, 1882.....	2,250 00	
Net Balance to credit of Earnings during 1882..	249,537 81	
		<hr/>
		<u>\$648,959 63</u>

And on the 31st December, 1882, the Balances were :

Quicksilver.....	240,448 00	
Materials and Supplies.....	76,859 53	
Ore Account.....	59,270 04	
		<hr/>
		\$376,577 57

Add

Expended for Improvements.....	\$47,260 17	
“ “ Garfield Shaft.....	39,381 46	
“ “ Buena Vista “.....	154,209 95	
“ “ Legal Expenses.....	315 10	
Remittances and Exchange.....	184,269 87	
		<hr/>
		425,436 55
		<hr/>
		\$802 014 12
Overdraft, purchase account and unpaid pay rolls,	153,054 49	
		<hr/>
		<u>\$648,959 63</u>

MATERIALS AND SUPPLIES 1882.

The changes in Materials and Supplies have been as follows:

Balance December 31st, 1881.....	\$87,217 73
Purchased during 1882.....	\$191,890 06
Less Sales.....	1,776 15
	<u>190,111 91</u>
Total Inventory and Purchases.....	\$277,329 64

Consumed for general operations:

At the Mine.....	\$71,312 86
At the Hacienda.....	62,454 58
	<u>\$133,767 44</u>

Used in Improvements,....\$17,110 87

“ at the Garfield Shaft, 19,602 52

“ “ Buena Vista “ 29,989 28

66,702 67

Balance on December 31st, 1882..76,859 53

\$277,329 64

MEMORANDUM OF PRINCIPAL SUPPLIES
ON HAND DECEMBER 31st, 1882.

Coal.....	\$21,810 43
Flasks.....	19,980 33
Hay and Grain.....	2,791 51
Iron, Steel and Hardware.....	5,516 55
Lumber and Timber.....	10,372 46
Laggings.....	1,014 48
Wood.....	12,143 11
	<hr/>
	\$73,628 87
Balance—Minor Items.....	3,230 66
	<hr/>
Total.....	\$76,859 53

IMPROVEMENTS 1882.

The expenditures for Improvements not charged
to expenses, present a total of..... \$47,260 17

FOR THE MINES.

Randol Shaft	\$360 00	
" Carpenter Shop	868 50	
" Planilla & R. R.	1,530 96	
Sta. Isabel Shaft, New Planilla.....	1,738 86	
Houses on the Hill.....	6,467 19	
Storehouses on Hill.....	942 18	
Waterworks on Hill.....	10,331 47	
		<u>\$22,239 16</u>

FOR THE HACIENDA.

Furnace Nos. 7 and 9, condensers.....	\$1,151 51	
" 6 " 	557 97	
" 1 " 	1,911 75	
" 8 " 	9,113 82	
General Improvements to Furnaces....	644 98	
Houses and Lands.....	11,640 98	
		<u>25,021 01</u>
		<u>\$47,260 17</u>

To which add expended at Garfield	
Shaft, for Shafts, Buildings and	
Machinery	39,381 46
At Buena Vista Shaft, for Shafts,	
Buildings and Machinery	154,209 95
	<u>\$193,591 41</u>

Making the total for Improvements and New
Shafts..... \$240,851 58

EARNINGS AND EXPENSES FOR 1882.

From

28,070 Flasks Quicksilver, product of

1882..... \$765,695 77

25,795 Flasks Quicksilver sold

during 1882, at an

average of \$27,906..\$719,836 31

Less

6,973 Flasks, product of 1881,

unsold Dec. 31st, 1881,

then valued at \$30

each, now counted

sold at \$27,906..... 194,588 54

Leaving

18,822 Flasks, product of 1882,

sold at \$27,906.....\$525,247 77

4,600 Flasks are consigned

abroad, valued at

\$26.00\$119,600 00

4,648 Flasks are in Cali-

fornia at \$26.00. . 120,848 00

240,448 00

28,070 Flasks Quicksilver,

average value \$27,278..... 765,695 77

From Rents, Privileges, and Discounts..... 17,839 86

Total earnings..... \$783,535 63

Total earnings brought forward..... \$783,535 63

EXPENSES.

Hacienda Pay Rolls..... \$48,149 88

Mine Pay Rolls..... 282,656 45

Miscellaneous and Taxes..... 34,121 35

Materials and Supplies consumed for

current use of Mine and Furnaces 133,767 44

Total Expenses..... ..\$498,695 12

Difference..... 284,840 51

Less:

Depreciation on 6,973 Flasks on

hand at Hacienda and abroad

December 31st, 1881, then valued

at \$30.00, now counted sold at

\$27.906.....\$14,601 46

Decrease in quality of ore on hand at

Hacienda, estimated..... 20,701 24

35,302 70

Net earnings.....\$249,537 81

ACTUAL EXPENSES PER FLASK OF QUICKSILVER PRODUCED IN 1882.

Production in flasks of 76½ lb. each 28,070 Flasks.

Hacienda Pay Rolls.....\$48,149 88

Average per flask, 1,715

Mine Pay Rolls 282,656 45

“ “ 10,070

Pay Rolls together..... 330,806 33

“ “ 11,785

Materials and Supplies..... 133,767 44

“ “ 4,766

Miscellaneous and Taxes.. 34,121 35

“ “ 1,215

Total.....\$498,695 12

Average per flask, 17,766

Less:

Rents, Privileges and Discounts... 17,839 86

Average per flask, 0.635

\$480,855 26

Total average per flask.....\$17,131

Add—Decrease in quantity of ore on

hand at Hacienda, estimated at.... 20,701 24

Average per flask, 0.738

\$501,566 50

Making net cost average per flask\$17,869

In the Mine Pay Rolls (\$282,656.45) there is

included for headwork and prospecting.... \$91,757 43

Average per flask.....\$3,268

DISPOSAL OF QUICKSILVER IN 1882.

On hand in California, December 31st, 1882.	2,787 flasks
Consigned " " " ..	4,186 "
Produced during 1882.....	28,070 "
	<hr/>
	35,043 flasks

Sales in California.....	18,609 flasks.
" " New York.....	2,400 "
" " South America	1,068 "
" " Mexico.....	2,714 "
" " Australia.....	704 "
" " China.....	300 "

Total Sales.....25,795 flasks.

Balance..... 9,248 flasks.

Accounted for as follows:

On hand, December 31st, 1882,

In California.....4,648 flasks.

Consigned:

In New York..... 300 flasks.

" South America.....1,300 "

" Mexico.....1,974 "

" Australia.....1,026 "

4,600 flasks.

Total..... 9,248 flasks.

EARNINGS AND EXPENSES

FOR 12 YEARS ENDING DECEMBER 31st, 1882.

EARNINGS.

Quicksilver produced 229,422 Flasks,	
Agregate value \$37 23.....	\$8,564,364 14
Miscellaneous and Ore Account..	550,904 42
	<hr/>
	\$9,115,268 56

EXPENSES.

Mine and Hacienda Pay Rolls...	\$3,712,518 54
Miscellaneous, Taxes and Ore Acct. reduced.....	578,892 64
Materials and Supplies consumed in operation of Mine & Furnaces.	1,061,151 47
	<hr/>
	\$5,352,562 65
Profit Balance.....	<hr/>
	\$3,762,705 91

Which is accounted for as follows:

There has been expended for Improvements and Repairs \$739,148 39 as below:

Furnaces and Condensers.....	\$281,395 93
Hoisting Works and Machinery..	305,737 48
Houses, Sheds and Shops.....	61,391 28
Ore Cleaning Floors, Flumes, Water Works, Tanks, Roads, and other surface Improvements.....	63,357 29
	<hr/>
	\$711,881 98

For Repairs previous to 1873, not included in current expenses, as all have been since.....

Improvements and Repairs together 739,148 39

Add:

Quicksilver lost by fire	\$1,650 00
Real Estate purchased \$16,000, less sale of Nevada property \$1,500....	14,500 00
Legal Expenses & Patent, \$33,858 57 less collected account, Patent ac- count \$2,250.....	31,608 57
Black debt of 1870.....	9,342 68
	<hr/>
	57,101 25

Remittances to New York Office and Exchange, \$2,894,861 86

Carried forward, \$3,691,111 50

Amount brought forward.....\$3,691 111 50

The remainder is embraced in the increase of property accounts as follows: On the 31st of December, 1870, the property accounts show Balances of

Cash.....	\$47,201 20
Quicksilver.....	9,207 00
Materials and Supplies.....	59,884 52
Ore.....	35,635 95
	<hr/>
	\$151,928 67

And on December 31st, 1882:

Quicksilver.....	240,448 00
Materials and Supplies.....	76,859 53
Ore.....	59,270 04
	<hr/>
	\$376,577 57
Difference.....	224,648 90

Less:

Overdrafts, Purchases & Pay Rolls, 153,054 49

	<hr/>	71,594 41
	<hr/>	
		<u><u>\$3,762,705 91</u></u>

DRIFTING, SINKING, &c. during 1882.

	FEET.
Santa Isabel Shaft.....	7.50
Garfield Shaft.....	447.50
Garfield Upraise.....	142.50
Garfield Upraise cut-down.....	140.00
Garfield Drain adit.....	138.50
Garfield Shaft Plats.....	42.00
Buena Vista Shaft.....	354.50
Buena Vista Condensor Adit....	245.50
Buena Vista Condenser Shaft.....	35.00
Buena Vista Drain Adit.....	435.00
March Adit.....	453.00
Deep Gulch Straight.....	85.00
800 North West No. 21.....	107.50
Santa Clara Adit " 27.....	53.50
Santa Clara N Cross-cut " 29.....	100.50
Santa Clara S. " " 30.....	77.50
900 South East " 28.....	534.00
1000 East " 23.....	485.00
1000 East " 23 A.....	137.00
1100 East " 16.....	156.50
1100 South West " 25.....	285.00
1300 North " 3.....	141.50
1300 North Cross-cut " 26.....	257.50
1400 West " 108.....	104.50
1500 South Winze H1.....	101.00
1600 North 6A.....	54.00
1600 West Winze E1.....	96.00
1700 West Rise E1.....	76.50
1700 West 20.....	54.50
1700 West, Rise 1700 32.....	15.50
1700 Winze.....J1.....	79.00

Carried forward, feet 5,443.00

Brought forward, 5,443.00

1700 West Winze	L1.....	31.50
1750 South East	31.....	54.50
1750 East	3 1.....	282.00
1800 West	18... ..	218.00
1800 South Cross-cut	33.....	79.00
1800 West	34.....	132.00
1800 East	34.....	48.00
1800 West Winze	B 1.....	30.50
1800 East Winze	G 1.....	76.00
1800 West Winze	K 1.....	66.00
1900 East Rise	G 1.....	27.50
1900 East	109	354.50
1900 Straight	109 A	242.00
1900 East	109 B.....	65.00
1900 Winze	I 1.....	84.00
1900 West	109 B.....	176.00
2000 Raise	I 1.....	16.00
2000 South West	111.....	428.00
2000 South East	112.....	872.50
2000 North	113.....	312.00
2000 South West	112 A.....	95.00

Total Feet,..... 9,133.00

ORE (GRANZA) FROM MINE 1882.

		TONS.	POUNDS.
1,000 foot level	Randol Shaft.....	141	.....
1,100 "	"	2,566	1,000
1,200 "	"	1,062	1,920
1,300 "	"	228	1,000
1,500 "	"	615	1,000
1,600 "	"	227	1,600
1,700 "	"	2,615	780
1,800 "	"	1,065	1,860
Total.....		9,236	860

1,700 "	Santa Isabel Shaft.....	523	700
1,900 "	" "	186	1,000
2,000 "	" "	3	.....

TOTAL ORES FROM MINE AND OLD DUMP, 1882.

	TONS.	POUNDS.
Granza.....	9,236	860
Tierras	14,705	1,620
" from Old Dump.....	9,952	.....
Terrero " "	322	.....
Total.....	34,216	480

T A B L E

*Showing the Number of Tons of Material Trammed during
the year 1882.*

Where Delivered.	Rock from Drifts and Shafts.	Rock from Vein.	Ore.	Tierras.	Totals.
Randol Tunnel..	9,928.50	38,581.29	8,523.58	13,141.83	70,175.20
Santa Isabel Sh'ft	19,561.50	6,515.79	712.85	1,563.98	28,354.12
Garfield Shaft ..	3,963.00	-----	-----	-----	3,963.00
Buena Vista Sh'ft	3,450.00	-----	-----	-----	3,450.00
B. V. Drain Adit	1,268.00	-----	-----	-----	1,268.00
B.V. Cond. Adit	884.00	-----	-----	-----	884.00
Garfield Bob St'n	277.00	-----	-----	-----	277.00
Garfield 200 level plat.....	148.00	-----	-----	-----	148.00
Garfield Upraise	1,429.25	-----	-----	-----	1,429.25
Totals.....	40,909.25	45,097.08	9,236.43	14,705.81	109,948.57

T A B L E

*Showing the Number of Tons of Ore Shipped to the Hacienda
during the year 1882.*

Where From.	Ore.	Terrero.	Tierras.	Totals.
Randol Tunnel....	8,523.58	-----	13,141.83	21,665.41
Old Dump.....	-----	322.00	9,952.00	10,274.00
Santa Isabel.....	712.85	-----	1,563.98	2,276.83
Totals.....	9,236.43	322.00	24,657.81	34,216.24

ORES ROASTED 1882.

AVERAGE PER CENT. 2.97.⁶.

	TONS.	POUNDS
Granza.....	9,569	1,700
Terrero.....	297	1,200
Tierras.....	26,206	300
Total Tons Roasted.....	<u>36,073</u>	<u>1200</u>

ON HAND AT HACIENDA 31st DECEMBER, 1882.

	TONS.	POUNDS
Granza.....	1,265	1,980
Terrero.....	195	750
Tierras.....	2,330	745
Total Tons on hand.....	<u>3,791</u>	<u>1475</u>

Statement of the number of Tons of Ore of all
qualities produced from the New Almaden Mines
IN 1882.

MONTHS.	GRANZA.		TERRERA.		TIERRAS.		TOTAL.	
	TONS	POUNDS	TONS	P'DS.	TONS.	P'DS	TONS.	P'DS.
January....	669	500	....	....	1007	1000	1676	1500
February,...	702	1000	....	....	1088	1000	1791	....
March.....	743	.....	....	....	1054	1000	1797	1000
April.....	857	.....	....	....	1432	...	2289	....
May.....	807	1500	56	....	2867	1000	3731	500
June.....	700	.....	76	....	3916	....	4692	....
July.....	788	500	72	....	3227	1000	4087	1500
August	913	740	52	....	3407	40	4372	780
September..	861	980	66	....	2811	1000	3738	1980
October....	692	1500	....	....	1129	1000	1822	500
November ..	684	240	....	....	1321	500	2005	740
December...	816	1900	....	....	1395	80	2211	1980
Totals.....	9236	860	322	....	24657	1620	34216	480

STATEMENT
OF THE NUMBER OF TONS OF ORE OF ALL QUALITIES REDUCED, AND FLASKS OF QUICKSILVER
PRODUCED AT THE NEW ALMADEN MINES IN 1882.

MONTHS.	GRANZA.		TERRERO.		GRANZITA AND TIERRAS.		TOTAL.		AVERAGE PER CT.	FLASKS QUICKSILVER.
	TONS.	POUNDS.	TONS.	POUNDS.	TONS.	POUNDS.	TONS.	POUNDS.		
January	474	1600	21	1200	1509	1800	2006	600	3.11	1632
February	746	300	2	1400	1304	1500	2053	1200	3.58	1924
March	793	1100	1	1600	1510	1500	2306	200	3.44	2078
April	815	700	.....	.....	2136	.....	2951	700	2.73	2110
May	854	500	36	.....	2584	.....	3474	500	2.69	2446
June	821	1800	64	1600	2496	.....	3382	1400	2.62	2318
July	938	200	23	800	2936	500	3897	1500	2.47	2522
August	650	1400	83	1400	3330	1500	4065	300	2.29	2432
September	837	1600	37	1000	3078	1500	3954	100	2.68	2766
October	918	1300	22	1000	2616	500	3557	800	3.05	2844
November	855	.....	2	1400	1958	1500	2816	900	3.55	2619
December	863	1200	.....	1800	744	.....	1608	1000	5.65	2379
Totals,	9569	1700	297	1200	26206	300	36073	1200	2.97 ⁶	28070

Ores Roasted..... 72,147,200 pounds or 36,073¹/₂ tons.
Quicksilver Produced..... 2,147,355 “ “ 1,073¹/₂ “
Total product of the Mines on the Company's property from July, 1850, to
31st December, 1882..... 764,959 Flasks or 58,519,363¹/₂ pounds.

PRODUCTION, PRICE & EXPORTS OF QUICKSILVER for 1882.

New Almaden Mine produced 28,070 Flasks.

Other Mines produced 24,662 Flasks.

1882.	NEW ALMADEN.	NAPA CONS. AND AETNA.	GREAT SULPHUR BANK.	REDING- TON.	GREAT EASTERN.	NEW IDRIA.	GUADA- LUPE.	VARIOUS.	TOTAL PRODUC- TION.	PRICE IN SAN FRANCISCO. Highest Lowest BY SEA:	EXPORTS. FLASKS.
January.	1632	430	395	623	178	179	50	33	3664	37½	China..... 19,451
February	1924	440	348	460	145	121	210	21	3767	37	Mexico..... 9,742
March...	2078	459	505	359	70	160	200	24	3946	37	Japan..... 620
April...	2110	525	486	319	174	127	299	.....	4027	38	Australia... 1,690
May....	2446	737	521	354	211	55	13	5	4611	38	N.Zealand.. 105
June....	2318	485	456	522	131	121	30	28	4167	37½	S. America, 1,985
July....	2522	380	410	579	195	169	.....	15	4381	37½	C. America 56
August..	2432	582	490	418	184	130	50	11	4685	37½	New York.. 1,100
Septem'r	2766	641	513	430	225	129	140	17	5209	37½	Various.... 22
October.	2844	580	516	370	251	266	60	13	5129	37½	Total by sea 34,771
Novem'r.	2619	718	200	280	96	156	81	55	4511	37½	By Rail Ov'd, 5,646
Decem'r.	2379	865	339	300	311	126	75	19	4635	36½	
Totals ..	28070	6842	5179	5014	2171	2124	1138	241	52732	38	Total Exp. 40,417

SAN FRANCISCO, December 31st, 1882.

LONDON IMPORTS, EXPORTS AND PRICES

DURING THE YEAR 1882.

IMPORTS.	MONTH.	PRICE.	
		HIGHEST.	LOWEST
		£ s. d.	£ s. d.
7,608 Flasks	January	6 5 0	6 0 0
4,300 "	February	6 0 0	6 0 0
7,947 "	March	6 0 0	5 17 6
10,607 "	April	6 5 0	5 17 6
4,546 "	May	6 0 0	5 17 6
6,490 "	June	5 18 9	5 17 6
492 "	July	5 17 6	5 17 6
1,178 "	August	5 17 6	5 17 6
600 "	September...	6 0 0	5 17 6
960 "	October	6 0 0	5 17 6
393 "	November...	5 17 6	5 16 9
800 "	December...	5 16 9	5 15 0
45,921 Flasks,		£6 5 0	£5 15 0

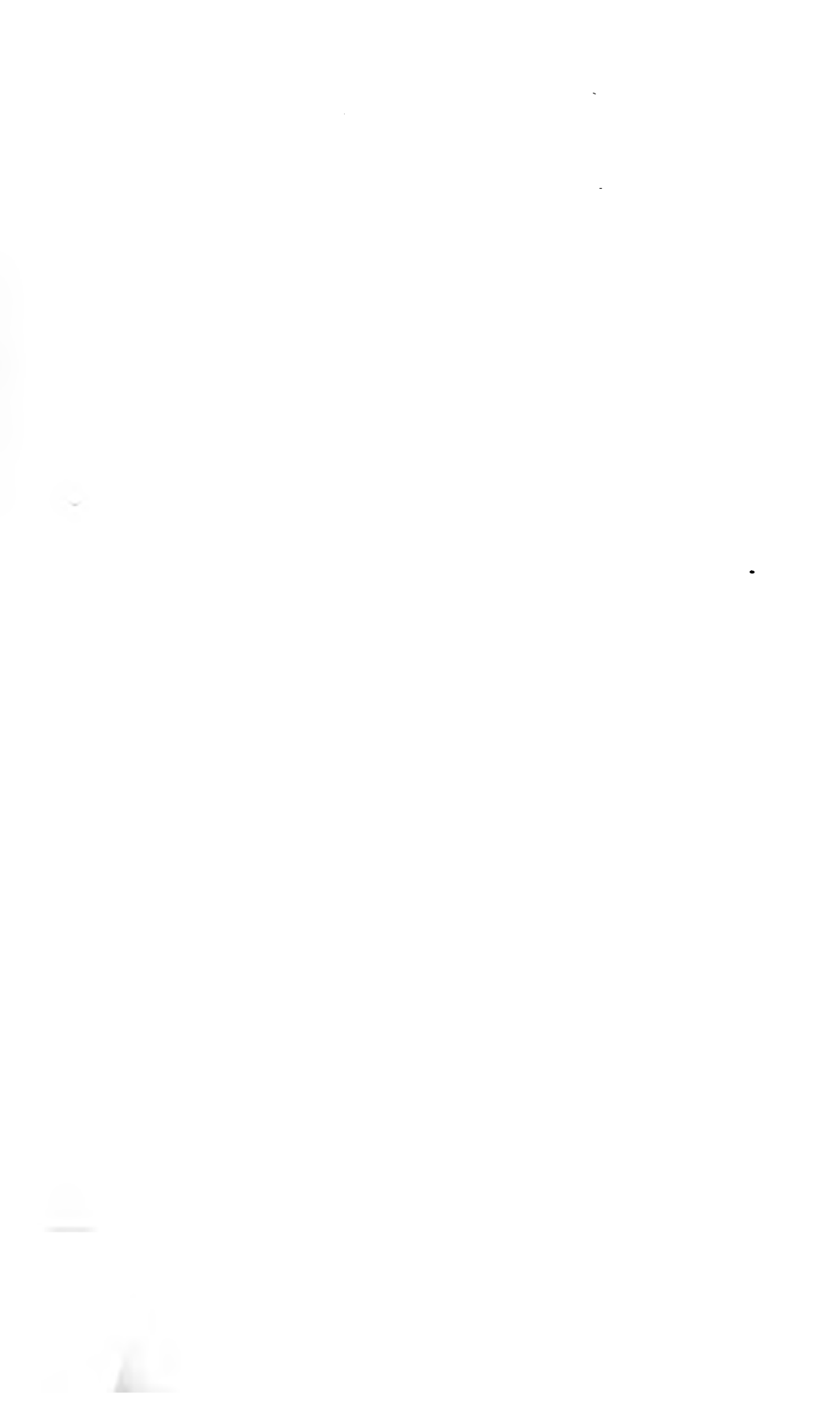
EXPORTS.	FLASKS.
To	
Germany	2,974
Russia	1,451
Holland	941
Belgium	779
France	6,871
Channel Islands	131
Portugal and Spain	473
Italy	33
Turkey	93
Norway, Sweden and Denmark	94
Morocco, Gold Coast and Egypt	99
Carried forward	13,939

EXPORTS FROM LONDON—*Continued.*

EXPORTS.		FLASKS.
Brought forward.....		13,939
To		
	Bombay and Madras.....	730
	Bengal.....	392
	British Burmah.....	31
	South Australia.....	150
	New South Wales.....	143
	Queensland.....	20
	Victoria.....	390
	New Zealand.....	61
	Canada.....	11
	United States of North America.....	13,116
	Mexico.....	5,562
	Central America.....	122
	Dutch West Indies.....	64
	Spanish West Indies.....	500
	United States of Columbia.....	238
	Peru.....	2,147
	Chili.....	647
	Uruguay.....	8
	Argentine Republic.....	2,083
	Brazil.....	59
	China.....	10
	Total Exports.....	40,423

J. B. RANDOL,

Manager.



NEW ALMADEN, CALIFORNIA,

January 15th, 1883.

MR. J. B. RANDOL,
Manager.

DEAR SIR:

In compliance with instructions received from you on the 7th inst., I have the honor to make the following report of the operations of the mine under your charge for the calendar year, 1882:

MINING OPERATIONS UNDERGROUND.

GARFIELD SHAFT.

The Garfield Shaft, on the 31st of December, 1881, had been sunk to a depth of 84 feet in two compartments.

To afford facilities for one pump and two hoists, it has been enlarged to 15' 8" x 6' 2", and sunk to a depth of 416½ feet, meeting an uprise from the level of the day tunnel of 142½ feet. Total depth, 559 feet.

The shaft has been cut down and timbered throughout, and a plat 8' x 9' x 16' excavated at the level of the Day Tunnel.

The shaft was sunk 31 feet below the Day Tunnel in August, at which depth such a large flow of water was encountered that, in the absence of pumping facilities, work had to be abandoned.

A drain adit for this shaft has been completed, the total distance driven being 138½ feet.

A shaft for the condensed water of the pumping engine was also sunk 46 feet, and connected with this drain adit, also connected with the main pump shaft at that depth. Executed by day labor.

There was no underground work at this shaft from September till December; but in the latter month the buildings and hoisting machinery at the surface being completed and in working order, a station 10' x 14' x 23½' for the pump bob was cut out and timbered.

A plat at the 200 level, 14' x 14' was also cut out 9 feet, 6 feet still remaining to complete it, when, on December 30th, all work at the shaft was shut down.

ISABEL SHAFT.

The Santa Isabel Shaft was 7 feet below the 2,000 level on December 31, 1881, and during January, 1882, was sunk 7½ feet farther.

A cistern plat was cut, and cistern and pump put in at the 2,000 level, and the skip loads brought down from the 1,900 level to the same point.

Since the 9th of January no operations have been carried on in the shaft itself, other than those incident to hoisting and necessary repairs.

On the 1st of August the first skip load of ore was hoisted through this shaft, since which time hoisting of ore has continued.

RANDOL SHAFT.

At the Randol Shaft, during the year past, no sinking has been carried on; but the shaft has been constantly employed as a means of exit for the ore and to get out from the lower levels; and also for lowering into the mine the great majority of the timber used in the drifts, labores, etc.

BUENA VISTA.

The Buena Vista shaft was started on the 5th of July, and sinking there continued until December 24th, when a depth of 324½ feet was reached.

The tepestate was hoisted by a temporary engine after the 31st of July. This engine has now given away to the erection of the permanent hoisting machinery.

The sinking has progressed in succession through detritus, clay, slate, or alta, serpentine-breccia, sandstone, serpentine, and alta.

The flow of water in the shaft since August 10th has varied from 4,000 to 18,000 gallons per day, the higher rate lasting only for a short period in November, and at the time driving the miners from their work.

The water has been raised from the shaft in barrels by the small engine mentioned.

The shaft has been timbered throughout, and 150 feet of the guides for the cage of the middle compartment have been put in from the bottom upward, in anticipation of a rise of water during the cessation of work.

A condenser adit has been run toward the shaft from the side hill 176½ feet, and a drift has also been run 13½ feet from this adit, to connect with the condenser shaft, and one of 20 feet to connect with the main pump shaft. Also 35½ feet were raised from this adit for a pump column shaft.

A shaft for the condensed water of the pumping engine has also been "raised" and timbered 35 feet from the condenser tunnel to the surface.

An adit (Deep Drain) for the water to be pumped from the shaft, was begun in September, and has been driven 432 feet through slate and alta. Work had to be stopped here on December 23d, on account of defective ventilation.

The balance of this adit will have to be driven from the shaft itself.

When completed, it will serve also for purposes of ventilation, will be 985 feet long, and will intersect the pump shaft 315 feet below its collar.

SANTA CLARA ADIT.

The Santa Clara Adit, intended as an outlet for the water from the Garfield Shaft, which had been stopped in November, 1881, was drifted 20 feet in February, when work was stopped to await the completion of the survey which was to connect it with the Garfield Shaft.

Work was resumed in March and continued during April, until a point under the Garfield Shaft was reached from which the upraise previously spoken of was made.

This adit is an extension of the Day Tunnel.

SANTA CLARA N. & S. X-CUTS.

The Santa Clara N. & S. X-Cuts were both started for prospecting purposes from the Santa Clara Adit in February.

Nearly the whole distance passed over was in barren vein matter, and work was stopped by your order in the month of May.

DEEP GULCH STRAIGHT.

The Deep Gulch Straight was also prospected 85 feet during August, through serpentine, with no other indications, when, on the 27th of the same month, work was stopped by your order.

MARCH TUNNEL.

The March Tunnel was started 460 feet below Mine Hill summit, and west of the Randol Shaft, on the road to the Isabel, with a view to prospecting the country to the South.

The total distance driven has amounted to 453 feet.

Work here was stopped in July in consequence of the greatly increased expenses of surface labor, due to the erection of the Buena Vista and Garfield shafts.

800 LEVEL.

At the 800 level but one drift was run during the year—No. 21 North-west, which in January was on vein and alta, with no ore to report on. During February it was on broken ground, intersecting deposits of vein matter, but no ore, when work in this direction was stopped.

900 LEVEL.

At the 900 level but one cross-cut was worked during the year—No. 28 S. E. Drifting here was continued throughout the year, a total distance of 534 feet being made to December 18th, when work was stopped by your order.

No vein was reached in this cross-cut during the year, the first five months it being in alta, while during the last seven it was in sandstone, slate and alta.

1,000 LEVEL.

At the 1,000 level two drifts were run during the year—No. 23 East (south-east) and No. 23 A East (north-east), work at the former extending throughout the year, and in the latter from August to December.

In the former the months from January to May were occupied in cross-cutting south-easterly in alta, which finally gave way to indications of vein matter. In June the vein was struck, and the drift was run south-east and north-east through good ore; at a distance of 24 feet in the south-east drift, a sharp bend occurs in the vein. From June to November it was run in ore varying from good to poor, when it entered a field of alta following a small vein, and was stopped on the 9th of

December, the developments not being sufficiently favorable to make further prospecting advisable.

No. 23 A East is the north-east branch of the one previously mentioned. Drifting here began on the 4th of August, and some very good ore was developed during the latter part of the month, which continued until the end of October, when the indications became less encouraging, the ore of low grade, and the vein gangue very hard. During November the grade improved slightly, but fell off again in December, the vein being well defined, but containing low grade ore only.

This drift is still being worked.

1,100 LEVEL.

At the 1,100 level two drifts were run during the year—No. 16 East and No. 25 South-west. These were both drifting in vein at the commencement of the year—the first being barren, the latter containing a little metal.

The months of January and February were without very material change for the better in either.

The vein in No. 25 in February and March took a sudden turn to the south and then to the south-east, so sharply that the drift could not follow it, and was run through barren ground. Small traces of metal were still to be seen in No. 16.

In April No. 16 was drifted easterly on vein—no ore, while No. 25 was drifted south east through alta, cross-cutting vein.

In May No. 16 was drifted on a barren vein, until the 17th, when work was stopped, as the indications were considered unfavorable.

Work on No. 25 was also stopped at the end of May, to await the result of the developments on the 1,000 level.

1,300 LEVEL.

At the 1,300 level two drifts (No. 3 north and No. 26 north cross cut) were worked, the former from January till April, the latter from January till June. The former was drifted throughout in vein, but no ore was developed, and the indications appearing unfavorable, work was discontinued.

No. 26 was first drifted in slate, then in sand-rock and alta, until the early part of July, when a cave which occurred in the 1,400 Jabore carried away about 90 feet of the level, stopping the work.

This cave has been repaired, and the level is now in good order.

1,400 LEVEL.

At the 1,400 level but one drift was run the past year—the No. 108 West. This drift was started on the 12th of January, about 200 feet south of the Isabel shaft, to drift west. The vein improved as the drifting proceeded, but the water increased so much that it was thought best to stop work on account of it, as it was feared a spring might be developed which would give trouble.

In the absence of surface springs sufficient to supply their wants two pumps (one at this level and one 300 feet above) were put in during the month of May to raise water to the surface for the boilers at the Isabel shaft.

In June work was resumed here, drifting proceeding on alta through broken vein gangue—no metal.

A contact of alta and serpentine was encountered during July, and vein during the early part of August, until such a large quantity of water was encountered that the drift was stopped.

1,500 LEVEL.

At the 1,500 level the south wing H_T was the only piece of work accomplished during the year, and was sunk for the purpose of prospecting the vein below this level. It was commenced in May, on vein with ore, and continued throughout in good ore, until the 26th of July, when it was connected with the 1,600 level.

1,600 LEVEL.

At the 1,600 level the drift No. 6 A north was started about October 23rd, on good ore and favorable indications, which were continued during November. At the end of December it was developing a low grade ore.

The west wing E_T which was begun in January, was sunk on vein-bearing metal, good ore being met in February and March. This wing was connected with E_T 1,700 W. rise by drifting through good ore.

This point of junction is now opened out into Labore XXXVII.

1,700 LEVEL.

The workings in the 1,700 and intermediate levels were the most successful of the year, and are still showing excellent returns.

No. 20 West was drifted $54\frac{1}{2}$ feet in January, first in ore-bearing vein and then in serpentine, and was then discontinued, and the rise already spoken of started and completed in March.

No. 32 West was commenced in March, about 600 north-west from the Randol shaft, to run east on ore, but after having run a distance of $15\frac{1}{2}$ feet, was stopped on account of the barrenness of the ground.

A winge J_T West was commenced in August from the 1,700 level to prospect the vein below the XXXVII Labore, and to afford better ventilation in the 1,800 level (west drift No. 34), and was sunk through the ore, which was of high grade, until connection was made with the 1,800 by a 4' rise.

A winge I_T West was sunk throughout the month of December in a good vein of ore having a southerly dip. It is still being worked.

Work on No. 31 East, which is an extension of Labore XXXIII, near winge V, between the 1,700 and 1,800 levels continued at intervals throughout the year. It was originally intended to connect with the rise from the 1,800 east for ventilation and for passing ore through, which connection with D_T 1,800 E. rise was made in February.

Work was then stopped here until May, when it was resumed, and drifting east, proceeded in good ore.

In June a fault in the vein was met, and the drift was continued north east, through broken and barren vein, when work was stopped, and a drift was run to the south-east, with ore on the foot-wall.

This, south-east drift, was continued in ore during July and August, when, passing into serpentine, work here was stopped and resumed on the 1,750 east, which was continued until December 18th through broken vein gangue, serpentine, and a contact of the latter with alta, when the drift was stopped by your order.

1,800 LEVEL.

At the 1,800 level 3 drifts, 1 cross cut, and 3 winges were run during the year.

No. 18 West was drifted in barren vein and alta, from February to July, when the work was stopped.

No. 33 South cross-cut was run during March, April and May, in vein, with a little ore, finally cross-cutting the vein through good ore, when serpentine was struck on the other side. Cross-cutting was then stopped, and, going back, drifting on the vein was resumed in a new drift.

No. 34 West, at first in good ore, which gradually fell away in quality until August 19th, when the drift was stopped in serpentine.

In the following month, No. 34 east drift was started in good ore, but was also stopped on the 21st of the month, as the vein had given out.

B_T West wing was sunk 27½ feet on vein in January, to connect with the 1,900 west rise B_T, but was stopped early in February without making the connection, a large quantity of carbonic acid gas having been encountered.

This connection has not yet been made.

G_T East wing was sunk on a wall of vein showing small traces of ore in April, to connect with the 1,900 east rise, and met this rise (which had been started near the same time), in the June following.

K_T West wing was begun in good ore in October, which continued during the month of November; but it fell off to low grade ore in December, which was still being met on the last of the month.

1,900 LEVEL.

In the 1,900 level No. 109 east was drifted on a barren vein during January and February, when low grade ore for 17 feet was encountered; but barren vein only was met from March to June. Drifting on vein, with low grade ore, continued during July and August.

No work was done here in September, but was resumed during October, to be stopped again on the 20th of November by your order.

At that time the drift was in low grade ore.

The No. 109 B east was begun in May, and drifted in low grade ore and then in serpentine until July 14th, at which date a new drift—

No. 109 B West was started from the former to prospect a vein which was crossed in sinking the new junction incline. After passing through a contact of serpentine and alta, it drifted into ore varying from good to low grade, until, on November 20, having gone 21 feet on a vein containing no ore, work was stopped by your order.

At a distance of 90 feet from the stopping point this drift had turned sharply to the north east.

The No. 109 A straight, which was drifting in serpentine at the end of 1881, continued in that formation until the latter part of April, when it was discontinued.

The sinking of the winge I_T , to ventilate the 2,000 level, was begun in May, and connection was made by an uprise in the latter part of June.

In Alta throughout.

2,000 LEVEL.

In the 2,000 level the No. 111 South-west and No. 112 South-east drifts were started from the foot of the Isabel shaft on the 9th of January, in alta, the work here being done by machine drills.

Another drift (No. 113 north) was also started with compressor drills in February, all the drifting being in alta, intersected by streaks of sandstone and lime rock, the latter in No. 113 being very hard.

This continued until the beginning of July, when work was stopped on No. 111 and No. 113, and No. 112 was cross cutting through alta.

In August No. 112 was cross-cut 62 feet more when the vein was developed, and 24 feet drifted north-east in the same.

During September this drift was run 45 feet—14 feet in ore and 31 feet in broken vein gangue and sandstone.

During October it was cross-cut 60' through sandstone and alta, and drifted 25 feet on a contact of serpentine and alta, without development of ore.

In November it was drifted east on the same contact, and then turned north and cross-cut 25 feet through alta, and 20½ feet through serpentine.

Cross-cutting was continued north in the same formation until the 19th of December, when the vein was struck, and the drifting continued north-east on vein about a foot wide to the end of the year.

The No. 112 A South-west was drifted in November in alta, on a vein formation, encountering an increase of water and some carbonic acid gas. Fair ore was developed early in the month, but the carbonic acid gas evolved from a spring flowing into the drift very much increased.

The drifts at this level are ventilated by a small blower engine, situated at the foot of winge I_T, and run by compressed air sent down from the surface. This engine breaking down the latter part of November, very little work was done during December, until the necessary repairs were made.

This drift No. 112 A was stopped on the 30th of December.

LABORES.

The following Labores were being worked on December 31, 1881:

XII 1300 N. (now XII 1200 N.)—In good ore and improving.

- XVII 1200 N.—In good ore, not very favorable.
 XXIV 1100 N. E.—In good ore with very good prospects.
 XXVII 1700 N.—Favorable indications.
 XXX 1700 W.—In good ore.
 XXXI 1700 N.—Improving in quality.
 XXXIII 1800 E.—In good ore.
 XXXV 1700 N.—Good streaks of ore.

During the year 1882 the following changes took place :

In January—XII 1300 N.—Slight improvements.

“ “ XXX 1700 W “ “

“ “ XXXV 1700 N “ “

In March—A new Labore, XXXVII 1700 W. was started between the 1600 and 1700 levels, which gave evidence of a very good body of high grade ore.

In March—XXX was stopped because XXXIX had worked into the same ground.

In April.—A new Labore, XXXVIII, was started from the 1300 level N on the 11th, but although starting with favorable indications, was stopped for lack of ore at end of June.

In June—XXIV showed improvement.

“ “ XXXV “ “

“ “ XXXVII, not so favorable.

“ “ XXXI was stopped, because it had reached the XXVI Labore, which had been worked in past years from the 1600.

In June—XXXVII, being now quite large was given to two contractors, the western division retaining its old designation, and the eastern being henceforth called XXXIX.

In June a new Labore, XXIV A, was started from the 1100 E, in pretty good ore.

In June a new Labore, from the 1750 XXXVI was started in good ore.

In August.—New Labores were started as follows :

XLI 1600 W. looked well.

XL 1750 E. in very good ore.

XLII 1900 E. in low grade ore.

In September.—XXXI 1800 E. was stopped, having worked up into XXXVI Labore.

In December.—A new Labore, from No. 23 A 1000 W. XLIII, was started in very good ore.

At the end of the year 1882 the following Labores were being worked :

XLIII 23 A 1000 W.—In medium ore, with chances of improving.

XXIV 1100 N. E.—In good ore, with good prospects.

XXIV A 1100 N. E.—Fair ore, with good prospects

XII —1200 N. E. — Not very good, and poor prospects.

XVII 1200 N. E.—In good ore, with fair prospects.

XLI 1600 W.—In good ore, but small quantity—may improve.

XXVII 1700 N.—In good ore, but will soon run out.

XXXV 1700 N.—In good ore, with fair prospects.

XXXVII 1700 W.—Not very good, and poor prospects.

XXXIX 1700 W.—Good ore, but danger of salivation in working it.

XL 1750 E.—Very good ore, with excellent prospects.

XXXVI 1750. E.—Fair ore, with good prospects.

XLII 1900 E.—Low grade ore, with poor prospects.

Labore XL from the 1750 East, has developed some very high grade ore, and looks very favorable.

There has been no marked change in any of the labores during the year other than those named.

OLD DUMP.

Surface working at the Old Dump, with low priced labor, continued during the months from May until October, when it was discontinued for the winter season on account of the early and heavy rains.

TIMBERING.

A great deal of timbering in the Labores has been necessary, and still more will become so when the reserves already mined in the labores shall be taken to the surface.

These constitute all the mining operations proper, carried on during the year.

AUXILIARY SURFACE OPERATIONS.

GARFIELD SHAFT.

The excavations for the permanent works at the Garfield Shaft, which was intended as the location for the machinery now at the Buena Vista, were first prospected during 1881, but the ground being found unsuitable, the substitution of lighter machinery was decided on.

The excavations were completed in June, and work on the foundations continued until the month of August, when laying of the foundation sills of the building itself was begun.

With a slight intermission during September, work progressed continuously on the building and machinery until December 30th, when the operations were shut down entirely.

At this time the buildings were completed, and the hoisting engine was in working condition, and had been operating one skip for 30 days.

The compressor was in order, and the pipes had been placed in the shaft over half its depth.

The pump was in complete running order, and had been worked satisfactorily, raising water to the outlet at the Day Tunnel.

The buildings here consist of a boiler and engine house, blacksmith and machine shop, carpenter shop, and tool and out houses.

A water supply tank—capacity 15,000 gallons connects with the main pipe line.

An excavation has been made for a coal pit, and over 300 tons of coal are now there for use in boiler room.

But one skip (the old self-dumping one in use previously,) is in position; the other is being manufactured in San Francisco.

The roads leading to this shaft from Mexican Town are cut in tough clay—are almost impassable in rainy weather, and will need much careful attending to.

BUENA VISTA SHAFT.

The Buena Vista Shaft, the collar of which is 162,⁰¹³ feet below that of the Isabel, and 459⁶³⁵ feet below the Randol, was started on June 29th, when the first prospect holes for sinking were dug.

Excavations for the foundations began on July 27th, work here has progressed steadily from that time to date.

Work at quarry, getting out stone for foundations, commenced June 14th.

Stone cutting terminated November 11th.

Rock hauling terminated November 27th.

Stone masonry, brick laying and boiler setting terminated December 15th.

At present the boilers are under steam, the hoisting engine is ready for working, the gallows frame is nearly completed, and the heavier parts of the pumping engine and compressor are in position.

At this shaft one large building contains the hoisting, pumping and compressor engines and boilers.

There is also a long building to be used as a machine, blacksmith and carpenter shop, and storage shed.

A coal pit has been excavated, and will be still further extended. Present contents about 200 tons Sidney Coal.

Three short routes leading to this shaft from the metal road have been constructed during the past year.

The pipe line from springs now fills the tank above the shaft with water, and runs into the boiler. Supply ample at present.

Shoots for wood have been made, and a space for a wood yard excavated.

It is expected that the hoisting engine will get to work February 1st, and the pump and compressor sometime in the latter part of that month, when rapid sinking of the shaft with machine drills can begin.

RANDOL SHAFT.

At the Randol Shaft and Planilla the works have been constantly employed throughout the year.

The pump being no longer required, as the water from the lower levels was taken at the Isabel, it was removed in September to the Garfield Shaft.

A new exhaust tank was placed at this shaft in October.

A new 1½" cable, 1600' long, was placed on reel of hoisting engine November 12th, and the old cable which had proven defective at one point, was cut in two, and the longest part sent to the Garfield.

A carpenter shop was erected at this shaft during the year.

RANDOL PLANILLA.

At the Planilla the following changes have taken place:

Additional drying surface for tierras has been provided for.

The trestle and track have been extended, and two additional screens have been placed in position.

The road throughout the length of the Planilla has been graded to throw off surface water. A little work still remains to be done here.

The road was also widened at one place, and the Planilla extended, to make room for a platform scale upon which is now weighed every load of metal (tierras as well as larger material) which comes from the two planillas.

ISABEL SHAFT.

At the Isabel Shaft, previous to hoisting metal, a planilla was constructed, which was subsequently roofed over before the rainy season set in.

Additional facilities have been secured for sending timber into the mine from the surface.

A shed for the protection of spare machinery, drills, piping, pump-columns, etc., was constructed near the boiler house.

The metal road leading to the shaft from the Randol Planilla has been worked considerably.

A small building was erected for the safe keeping of the tools used at the Planilla.

WATER WORKS.

The fresh water supply for the boiler feed not being sufficient to meet the wants of the Hill, and the water pumped from the 1400 level at the Isabel, not being regarded as fitted for use except in case of absolute necessity, a survey was made

in May preliminary to establishing pipe connection between the different shafts and two springs which had been discovered on the hills to the southwest.

The higher of the two springs was proved to be 182 feet above the summit of Mine Hill, while the lower was 78 feet below the same point.

As the former was at the time flowing 20 gallons per minute it was judged that it would fully meet all the necessities of the boilers.

A pipe line was therefore run nearly in a straight line, from a pressure box at the end of a flume 1000' long, leading from the upper spring, over the top of Mine Hill, and to the Buena Vista Shaft, connection with the old tanks at the Garfield and Randol Shafts being made *en route*.

The total length of this line, as surveyed, was 9027 feet—5018 feet to top of Mine Hill, being run in 2½", and 4009', from this point to the Buena Vista, in 2" pipe.

Two new tanks were placed at the summit of Mine Hill, to act as storage reservoirs for all points beyond; and another was placed below the Randol Shaft as a reservoir to the Buena Vista boilers—making five tanks in all, with a combined storage capacity of 75000 gallons.

Unfortunately, the flow of water from the upper spring did not fulfill the expectations it had excited. During the summer months the supply fell off continually, until at the end of September it was but 5400 gallons per day. The lower spring at the same time gave a flow of about 7200 gallons per day of 24 hours.

To utilize the water from this lower spring, it was decided to connect it with the pipe line by a flume 2400 feet long, skirting the side of the hill, emptying into a common pressure box at the point of junction.

As this point was below the summit of Mine Hill, it became necessary to take the pipe and tanks down from the summit, run the line around the hill on a contour slightly below the level of the Garfield shaft, to reconnect again with the old line near the Randol tank.

The two Mine Hill tanks have been brought down from the summit, and placed in a convenient location to the south-east of the Hill office.

Another tank—capacity 15,000 gallons—has been placed immediately above the Buena Vista shaft.

Total storage capacity at present 90,000 gallons.

At present the supply of water for the boilers is ample, and the surplus is being used by the inhabitants of the Hill, at a monthly tax of \$1 per house.

The collections from this tax now average about \$70 per month.

A small pipe line was also run in October, connecting a spring above "Kempville" with that place. The material used in this line was all old. The pipe was unfit for other purposes, and the receptacle placed at the terminus was an old exhaust tank which had been thrown aside as useless.

The total cost of this line for labor was \$48. The water rents from it amount to \$5 per month, and it can supply three times the number of families now making use of it.

OPERATIONS OF FURNACES.

FURNACE No. 1.

Furnace No. 1, which had not been working since November, 1881, was put in operation on the 4th of April, some important improvements having previously been made in its condensers.

On the 5th of November, the work at the old dump having been stopped, and the stock of metal on hand from that source being exhausted, the furnace was shut down for the balance of the year.

FURNACE No. 2.

Furnace No. 2 was in continual operation throughout the year to October 2d, when the supply of granzita (screened terres) getting short, and work at the old Dump having stopped for the winter season, on account of the unusually early and heavy rains, the furnace was shut down, leaving No. 1 to clean up the small stock on hand.

At this furnace the quantity of wood per day was decreased from $1\frac{1}{2}$ to $\frac{1}{2}$ cords per 24 hours, and 500 lbs. Sydney coal was used in place of the $\frac{1}{2}$ cord of wood. This was found to work well, and to effect a saving of \$1.09 per day in the cost of fuel.

A second water-back has been ordered placed in the first condenser chamber of this furnace, and three wooden screens in the condenser chambers adjacent.

FURNACE No. 3.

Furnace No 3 was in steady operation throughout the year until December 1st, when, having run continuously for 13 months, and the supply of terres becoming low, it was shut down for the balance of the year.

In January the quantity of wood used daily before that time was reduced one cord, and 1,000 lbs. of coal substituted, producing a saving of \$2.18 per day. The results were such as to cause change to remain permanent.

Orders have been given to replace the water-back now in the condenser system of this furnace by a wooden screen.

FURNACE No. 6.

Furnace No. 6 was run in January but one charge, in consequence of considerable time being occupied in putting in a water-back for cooling the fumes

During February, March and April two charges, and throughout the balance of the year three charges per month were run.

During August a second water-back was placed in the first condenser, between charges, and without interfering at all with the working of the furnace. The result is that the fumes are condensed very close to the furnace.

The last of the old adobes were burned in this furnace in the month of October.

The very high per centage given by this furnace in December is due to the fact that the ore roasted was mostly from the rich labores of the 1,700 and intermediate levels.

FURNACE No. 8.

Furnace No. 8 was not in operation until July 11th, 1882.

Previous to this time two new brick condensers were built and attached to it, also a condensing system similar to No. 9 furnace condenser—*i. e.*, large pipes immersed in a tank containing water—the only difference being in the use of earthen pipes instead of the more costly iron ones in No. 9.

The furnace was run from July 11 to September 25, when firing was stopped, to enable the water-tanks in the line of condensers to be emptied to stop some leaks in the pipes.

It was again started on the 12th of October, and with the exception of missing three charges on the 11th of November, due to an accident to the elevator, has been in continuous operation ever since.

FURNACES Nos. 7 AND 9.

Furnace No. 7 was worked continuously throughout January, while No. 9 was not connected with its new condensers until the 22d of the month.

This new condenser system has a line of iron pipes passing through a tank containing water, after the pattern of those in use at the Idria Mine, in Austria. The condensers work very well.

The experiment of using 300 lbs. Sydney coal and $\frac{1}{4}$ cord of wood per 24 hours, instead of $\frac{1}{3}$ cord of wood, was abandoned during February, as the distribution of the 300 lbs. of coal, at intervals, during the 24 hours, among the $\frac{1}{4}$ cord of wood in the three fire-places, was not found to generate sufficient heat.

From January 22d both these furnaces worked continuously until the 5th of August, when the rod that supports the cone in the hopper of No. 7 parted, and the furnace was shut down.

On examination, the rod and cast-iron cone were found to be worn and eaten away by the acid fumes. A new cone was put in position, and the furnace put in operation on the 20th.

While stopped, two water-backs, with 4-inch tubing were put in the condensers for cooling the fumes.

On the 4th and 5th of October No. 7 also missed a few charges, the fires having been slowed down in consequence of the caving in of an arched roof of a small old condenser belonging to No. 5, to which No. 7 was attached in May, 1881.

Both furnaces worked the balance of the year without interruption.

Since No. 9 has been furnished with its new water-tank and pipes, it is found to yield silver closer to the furnace. The percentage of yield, however, between this furnace and No. 7 is practically the same, the only difference being that the latter distributes its metal over more surface, condenses farther from the furnace, and that more time, labor and

care are therefore required to clean the condensers and collect the soot.

HOUSE AND LAND IMPROVEMENTS.

The improvements and renewals for the year have been quite extensive.

A new store-house, for safe-keeping of supplies, has been erected near the Hill office. All supplies were moved into the same on December 3d.

A double-set dwelling was erected at Kempville by day labor; at present used as a boarding-house for mechanics at Buena Vista.

Four new dwelling-houses were erected on the Hill, between English and Mexican Towns. Contract Work. Cost, \$640 per house. Now rent at \$96 per year each.

Four new dwelling-houses were erected at Kempville. Contract work. Cost \$610 per house. Now rent at \$72 per year each.

Additions were placed on four houses at Hacienda at increased rentals.

A house was built at Hacienda for the purpose of a laundry. Rents at \$6.00 per month.

The walk along the street at Hacienda has undergone repairs, the material used being brick left from the old condensers.

A new division fence is in process of erection between the Company's property and the land owned by G. F. Bose. Length of fence, 4,000 feet. Mr. Bose bears half the expense.

A new fence is being placed around a 70 acre field in the agricultural lands. Field to be planted in alfalfa for company stock purposes.

Work has been commenced on the first of two new 4-set teneinents in Mexican town, to replace several old buildings which are endangered by the caving in of the New World Labore. Estimated cost of whole about \$3,500. Total rent-age, \$384 per year.

Numerous repairs have been made to houses on the Hill, an increase in the rent, under your orders, compensating for the expenditures in all cases where the work was not deemed absolutely necessary. As many of the houses are very old, even this restriction does not prevent numerous applications for repairs under those conditions.

Considerable repairing has been done at the plat for dumping ore at the head of the first incline.

The roads connecting the different points on the hill have been extensively worked, and are now in fair condition for this season of the year.

Several drains and sewers have been laid at Hacienda and on Hill for sanitary reasons, or for drainage purposes.

A fence 2,000 feet long has been built, enclosing a piece of land bordering the creek, for pasturage purposes.

Numerous other repairs, of greater or less importance, have been made to yards, fences, houses etc., both at the Hacienda and on the Hill.

The voluminous tables furnished you from the office here will, it is hoped, give all the statistical information which may be desired relative to cost of material, labor, fuel and other necessary expenses connected with the Mine and Works; together with all the data relative to production, both of the crude ore and the refined metal.

Hoping that this report may prove all that you desire,
I remain, sir,

Very respectfully,

Your obedient servant,

FRANK S. RICE,
Assistant Superintendent.

STATEMENT AND BALANCE SHEET

OF THE

QUICKSILVER MINING CO.

1882.

STATEMENT OF THE BUSINESS OF THE QUICKSILVER MINING COMPANY FOR 1882.

Dr.	Cr.
Quicksilver and Ore on hand per last yearly report, and cost of Quicksilver produced and Ore mined in 1882. \$779,978 93	Balance to the credit of Income Account January 1st, 1882. \$2,157,106 70
Improvements General, Furnaces, &c. . . 47,260 17	Sales of Quicksilver, 719,836 31
“ Extraordinary, Sinking	Interest and Discount, 2,193 06
Shafts, Machinery, &c. 193,591 41	Rents, Privileges, &c. 16,926 25
Legal Expenses, San Francisco and New York, 740 10	Ore on hand, 59,270 04
Taxes, 4,515 58	Quicksilver on hand 240,448 00
Exchange 20 00	
General Expenses 11,767 20	
Dividend Preferred Stock, \$257,478 00	
“ Common “ 22,834 80— 280,312 80	
Balance to the credit of Income Account December 31, 1882. 1,877,594 17	
	<u>\$3,195,780 36</u>

NEW YORK, December 31st. 1882.

THE QUICKSILVER MINING COMPANY,

BALANCE SHEET.

DECEMBER 31st, 1882.

Dr.	Cr.
To Real Estate and Mining Property,	Capital Stock, Preferred \$4,291,300 00
Furnaces, Houses and Lands,	" " Common 5,708,700 00
Machinery, Tools, &c., &c.....\$11,650,531 58	Income Account 1,877,594 17
" Cash 3,539 51	Overdraft, Purchases and Pay Rolls. 153,054 49
" Quicksilver..... 240,448 00	
" Ore..... 59,270 04	
" Materials and Supplies..... 76,859 53	
	<u>\$12,030,648 66</u>

NEW YORK, December 31st, 1882.

\$12,030,648 66



